

Form Num. 40-005414

LIBBY ASBESTOS PROJECT
Property Closeout Checklist (PCC)
Revision 3


 1157809 - R8 SDMS
Form Date: 8-3-09
 Field Logbook No.: 101121 Page No.'s: 19, 15, 4
101103 8
Address: Libby Creek City: LibbyOccupant: NAOwner: State of MontanaOversight Personnel: K. Beaulieu, S. McNallyRemoval Contractor: ERRestoration Contractor: ERAssociated BD Numbers: NAPCC Check Completed by (100% of forms): W. Cunningham Date: 10/21/09

Data Item	Value		Comments
Type of removal activity <i>circle all that apply</i>	VCI removal Interior cleaning Exterior removal Building materials Other: <u>Riprap</u>		Circle all that apply: Quick Response Partial Removal
	Start	Finish	
Interior setup date(s)	NA	NA	NA implies interior work not needed
Interior removal date(s)	NA	NA	NA implies interior work not needed
Interior restoration date(s)	NA	NA 8-10-09 8-11-09	NA implies interior work not needed
Exterior setup date(s)	8-3-09	8-4-09	NA implies exterior work not needed
Exterior removal date(s)	8-4-09	8-25-09	NA implies exterior work not needed
Exterior restoration date(s)	8-17-09	8-18-09 8-19-09 8-20-09 8-21-09 8-22-09 8-23-09 8-24-09 8-25-09 8-26-09 8-27-09 8-28-09 8-29-09 8-30-09 8-31-09 9-1-09 9-2-09 9-3-09 9-4-09 9-5-09 9-6-09 9-7-09 9-8-09 9-9-09 9-10-09 9-11-09 9-12-09 9-13-09 9-14-09 9-15-09 9-16-09 9-17-09 9-18-09 9-19-09 9-20-09 9-21-09 9-22-09 9-23-09 9-24-09 9-25-09 9-26-09 9-27-09 9-28-09 9-29-09 9-30-09 10-1-09 10-2-09 10-3-09 10-4-09 10-5-09 10-6-09 10-7-09 10-8-09 10-9-09 10-10-09 10-11-09 10-12-09 10-13-09 10-14-09 10-15-09 10-16-09 10-17-09 10-18-09 10-19-09 10-20-09 10-21-09 10-22-09 10-23-09 10-24-09 10-25-09 10-26-09 10-27-09 10-28-09 10-29-09 10-30-09 10-31-09	NA implies exterior work not needed <u>09/03/09</u> <u>10/17/09</u>
Total days at property [Include weekends]	<u>39</u> ³² <u>10/17/09</u>		
Contaminated material removed <i>circle all that apply</i>	Soil VCI Other Insulation Household Items Rubbish/Debris Other: <u>Riprap</u>		

Data Item	Value	Comments
<i>Cubic yards (Yd³) of contaminated material removed:</i>		
Soil	<u>499</u> Yd ³ NA	
VCI	<u>NA</u> Yd ³	
Other insulation	<u>NA</u> Yd ³	Type of insulation removed:
Household Items	Description: <u>NA</u>	
Rubbish/Debris	<u>95</u> Truckloads NA	Description: <u>Riprap</u>
Any contaminated material remaining after removal is complete? [responses must be consistent within the shaded sections]	No - circle if next two items are circled NA below Soil - circle if Contaminated soil remaining is circled below VCI - circle if VCI remaining is circled below	
[responses must be consistent within the shaded sections] Contaminated soil remaining NA [When revising this section also revise corresponding item in shaded section above]	Location description: Areas A2, A3, A1, A4 ^{mg10102109} had < 1% Libby amphibol at 12-14" BGS ^{mg10102109} Areas A1 , A1, B1, A2, A3, B2 had visible Vermiculite at 12" BGS Area A5 had visible vermiculite at 48-74" BGS	
[responses must be consistent within the shaded sections] VCI remaining NA [When revising this section also revise corresponding item in shaded section above]	Location description: [Include RAWP Addendum background information]	

Data Item	Value	Comments
-----------	-------	----------

Cubic yards (Yd³) of material replaced:

Insulation	<u>NA</u> Yd ³	Type:
Residential fill	<u>244</u> Yd ³ NA	
Topsoil	<u>NA</u> Yd ³	
Other material (i.e., gravel)	<u>(a) 237, (b) 137, (c) 1000</u> Yd ³ NA	Type: (a) 3/4" minus crushed rock (b) 2" minus crushed rock (c) Riprap
HEPA vacuum given to resident?	Date: _____ <u>Not given</u>	Reason:
Items damaged during construction	<input type="checkbox"/> See removal and restoration checklist <input checked="" type="checkbox"/> None	

ADDITIONAL INFORMATION

One Amendment Two Mods

LIBBY CREEK
MONTANA

2R- 07083

> AREA C, B3
12-14"

ND

NO VISIBLE

SP- 141276

2R- 07084

> AREA B2
12-14"

ND
visible (1 low)

SP- 141277

2R- 07087

> AREA B1
12-14"

ND
visible observed
(1 low)

SP- 141278

2R- 07126

> AREA D1
12-14"

ND
resampled as Area D2

SP- 141293

2R- 07133

> AREA A2
12-14"

< 1%

visible observed
(2 low)

SP- 141300

2R- 07134

> AREA A3
12-14"

< 1%
visible observed
(6 low)

SP- 141301



CLIENT _____
PROJECT _____
DETAIL _____

JOB NO. _____
DATE CHECKED _____
CHECKED BY _____

AD-005414
COMPUTED BY _____
DATE _____
PAGE NO. _____

2R- 07509

SP- 141305

> AREA A1
12-14" BGS

LIBBY CREEK
MONTANA
2 low visible

2R- 07510

SP- 141306

> AREA A4
12-14" BGS

mgl 10/21/09
~~4%~~ ND
no visible

2R- 07273

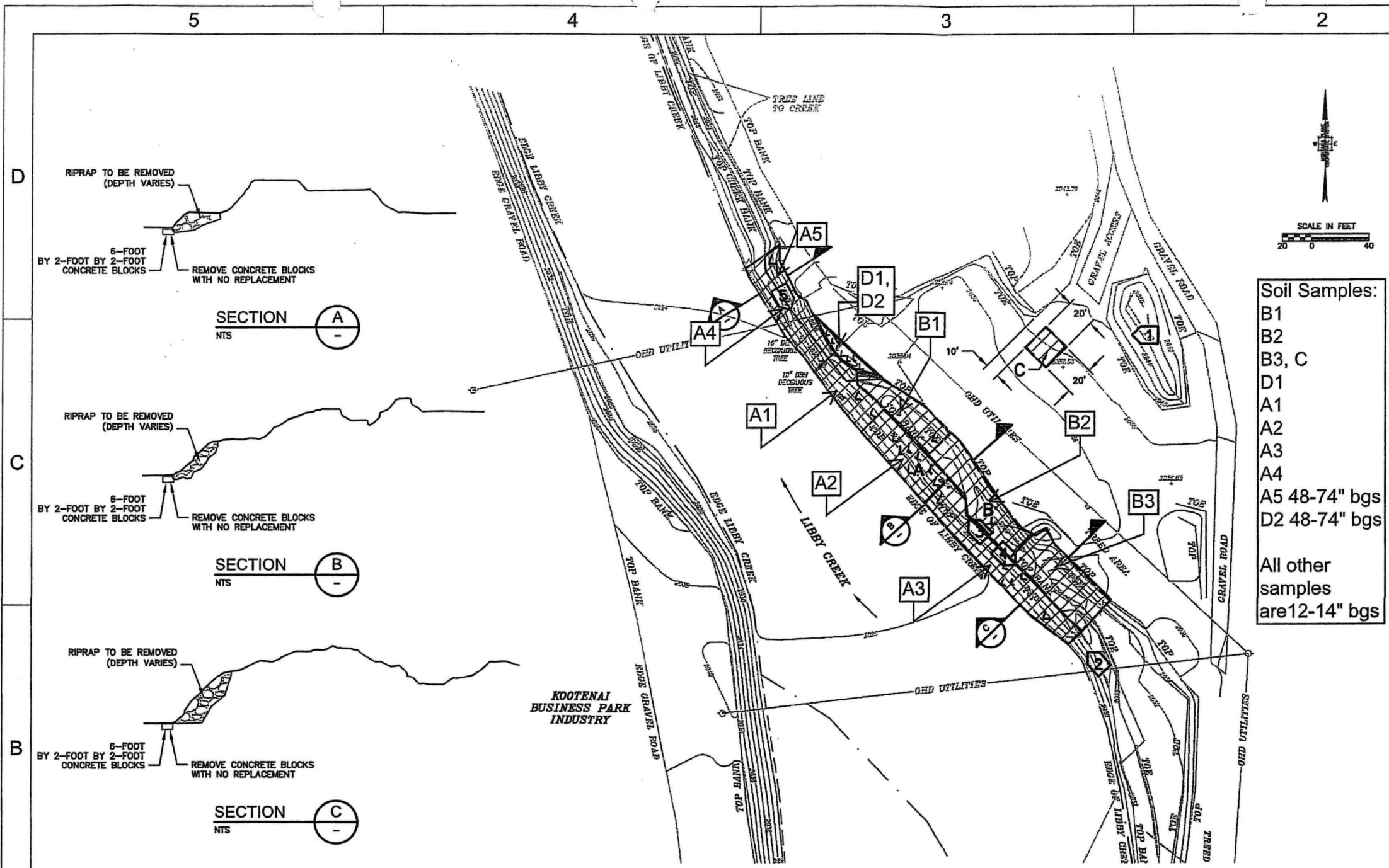
SP- 140813

> Area A5, D2
48"-74"

ND
1 Low visible

5 mgl 10/21/06
Page 4 of 6

AD-005414



Soil Samples:
B1
B2
B3, C
D1
A1
A2
A3
A4
A5 48-74" bgs
D2 48-74" bgs

All other samples are 12-14" bgs

- EXTERIOR REMEDIATION NOTES:**
(REFER TO CONTRACT DOCUMENTS FOR ADDITIONAL INFORMATION)
1. THIS PROPERTY HAS BEEN INSPECTED USING STANDARD OPERATING PROCEDURE CDM LIBBY-06.
 2. THE REMOVAL CONTRACTOR SHALL PERFORM THE WORK WHILE MINIMIZING ENVIRONMENTAL POLLUTION AND DAMAGE AS THE RESULT OF CONSTRUCTION OPERATIONS. THE ENVIRONMENTAL RESOURCES WITHIN THE PROJECT BOUNDARIES AND THOSE AFFECTED OUTSIDE THE CONSTRUCTION LIMITS SHALL BE PROTECTED DURING THE ENTIRE DURATION OF THIS PROJECT.
 3. THE REMOVAL CONTRACTOR SHALL PLACE SAND BAGS WITHIN THE CREEK BED UPSTREAM OF EXCAVATION AREAS ADJACENT TO FLOWING WATER TO MINIMIZE FLOW AND LOCALIZE SEDIMENT TRANSPORTATION.
 4. THE REMOVAL CONTRACTOR SHALL PROVIDE THE WATER SOURCE FOR PERSONNEL AND EQUIPMENT DECONTAMINATION. DECONTAMINATION WATER WILL BE CAPTURED AND DISPOSED OF PROPERLY.
 5. REMOVE ALL RIPRAP FROM THE CREEK BANK (AREA A) IN ADDITION TO 12 INCHES BELOW GROUND SURFACE.
- BEST MANAGEMENT PRACTICE NOTES:**
1. APPROPRIATE EROSION AND SEDIMENT CONTROLS (SILT FENCES, TEMPORARY WATER RETENTION BERMS, ETC.) SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF WORK AND SHALL BE MAINTAINED FOR THE DURATION OF REMOVAL ACTIVITIES.
 2. EQUIPMENT SHALL BE PRESSURE WASHED PRIOR TO SITE ENTRY TO PREVENT THE SPREAD OF NOXIOUS WEEDS TO THE REMOVAL AREA.
 3. EQUIPMENT USED NEAR THE WATER SHALL BE CLEANED PRIOR TO CONSTRUCTION.
 4. WORK SHALL BE CONDUCTED DURING A PERIOD OF LOW FLOW.
 5. BIODEGRADABLE HYDRAULIC FLUIDS SHALL BE USED IN MACHINERY WHERE APPROPRIATE.
 6. REFUELING SHALL OCCUR ON THE BACKSIDE OF THE LEVEE OR ON ESTABLISHED STAGING AREAS.
 7. CONSTRUCTION EQUIPMENT SHALL BE REGULARLY CHECKED FOR DRIPS OR LEAKS.
 8. AT LEAST ONE FUEL SPILL KIT WITH ABSORBENT PADS SHALL BE ONSITE AT ALL TIMES.
 9. DRIVE TRAINS OF EQUIPMENT SHALL NOT OPERATE IN THE WATER.

12" BGS EXCAVATION DEPTH

EXCAVATION QUANTITIES			
AREA DESIGNATION	AREA (ft ²)	DEPTH (in.)	IN-PLACE VOLUME (yd ³)
A	7379	12	273
B	5405	12	200
C	400	12	15
RIPRAP	-	-	1000*
TOTAL			1488*

* RIPRAP VOLUME IS ESTIMATED BASED ON FIELD MEASUREMENTS AND VISUAL OBSERVATIONS.

NOTE: REFER TO SHEET C-1 FOR GENERAL NOTES, LEGENDS, MAPS AND OTHER INFORMATION. REFER TO SHEET C-2 FOR DETAILS.

Revisions			
Symbol	Descriptions	Date	Approved

CDM Federal Programs Corporation		U.S. DEPARTMENT OF TRANSPORTATION JOHN A. VOLPE NATIONAL TRANSPORTATION SYSTEMS CENTER	
Designed by: N. L. SMITH	US EPA Region VIII Denver, Colorado	LIBBY ASBESTOS PROJECT LIBBY, MONTANA	
Drawn by: M. KUZMAK		LIBBY CREEK REMEDATION PLAN	
Checked by: G. McKENZIE		Scale: AS NOTED	Plot Scale: 1 : 1
Submitted by: T. WALL	Date: JUNE 5, 2009	Sheet number:	Design File: LIBBY_CREEK.DWG
	Dwg. No.:		File No.:

